



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,040	12/10/2003	Douglas R. Dole	26978 USA	9198
23307	7590	10/20/2005		
SYNNESTVEDT & LECHNER, LLP 2600 ARAMARK TOWER 1101 MARKET STREET PHILADELPHIA, PA 191072950			EXAMINER DUNWOODY, AARON M	
			ART UNIT	PAPER NUMBER
			3679	

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/734,040

Applicant(s)

DOLE, DOUGLAS R.

Examiner

Aaron M. Dunwoody

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 August 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Drawings*

The drawings were received on 8/5/2005. These drawings are approved.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-14 are rejected under 35 U.S.C. 102(b) as being anticipated by US patent 4643464, Weinhold.

In regards to claim 1, Weinhold discloses a coupling assembly for flexibly joining pipes (10, 11) to one another end to end and permitting relative axial, torsional and angular deflection between the pipes, the coupling assembly comprising:

a first ring (14) attachable to an end of one of the pipes, the first ring having an outer diameter greater than the pipe and an outwardly facing circumferential groove therein;

a first sealing member (15) positionable within the groove of the first ring and extending circumferentially therearound;

a second ring (14) attachable to an end of another of the pipes, the second ring having an outer diameter greater than the other pipe and an outwardly facing circumferential groove therein;

Art Unit: 3679

a second sealing member (15) positionable within the groove of the second ring and extending circumferentially therearound;

a band (23) positionable in overlying relation with and surrounding the first and second rings, the band having an inwardly facing surface sealingly engageable with the first and second sealing members and having a width sufficient to allow a gap between the pipes; and

a housing (24) positionable in overlying relation with and surrounding the rings and radially spaced apart from the band, the housing having a pair of first shoulders (25) positioned in spaced apart relation, each the first shoulders being engageable with one of the rings for limiting axial and angular deflection of one pipe relative to the other, and a pair of second shoulders (30) positioned in spaced apart relation, each shoulder being engageable with the band for maintaining the band substantially concentric within the housing.

In regards to claim 2, Weinhold discloses one of the rings having an inner diameter sized to receive the pipe end in substantially coaxial engagement.

In regards to claim 3, Weinhold discloses the housing comprising a plurality of housing portions attachable to one another end to end to extend around the pipe ends.

In regards to claim 4, Weinhold discloses the housing comprising a pair of circumferential rims positioned in longitudinally spaced apart relation, each the rim extending radially inwardly and being in spaced relation to the pipes, the rims being engageable with the pipes upon angular deflection thereof for maintaining the spaced relation between the housing and the band.

Art Unit: 3679

In regards to claim 5, Weinhold discloses the shoulders being positioned at a predetermined longitudinal distance from one another so as to engage the rings and thereby limit angular deflection between the pipes to a maximum of up to about 2°.

In regards to claim 6, Weinhold discloses the shoulders being positioned at a predetermined longitudinal distance from one another so as to engage the rings and thereby limit angular deflection between the pipes to a maximum of up to about 4°.

In regards to claim 7, Weinhold discloses the rings being attached to the pipe ends by welding.

In regards to claim 8, Weinhold discloses the sealing members comprising O-rings:

In regards to claim 9, Weinhold discloses the band comprising a single piece.

In regards to claim 10, Weinhold discloses a coupling flexibly joining pipes to one another end to end and permitting axial, torsional and angular deflection between the pipes, the coupling comprising:

a first ring attached coaxially around an end of one of the pipes, the first ring having an outwardly facing circumferential groove therein;

a first sealing member positioned within the groove of the first ring and extending circumferentially therearound;

a second ring attached coaxially around an end of another of the pipes, the second ring having an outwardly facing circumferential groove therein;

a second sealing member positioned within the groove of the second ring and extending circumferentially therearound;

Art Unit: 3679

a band positioned coaxially surrounding the first and second rings, the band having an inwardly facing surface sealingly engaging the first and second sealing members and having a width sufficient to allow a gap between the pipes; and

a housing coaxially surrounding the rings and the band, the housing being radially spaced apart from the band and having a pair of circumferential rims positioned in longitudinally spaced apart relation, each the rim extending radially inwardly and being in spaced relation with the pipes, the rims being engageable with the pipes upon angular deflection thereof for maintaining substantially coaxial, radially spaced relation between the housing and the band, the housing having a pair of first shoulders positioned in spaced apart relation facing one another, the rings being positioned between the first shoulders, each the first shoulder being engageable with one of the rings for limiting axial and angular deflection of one pipe relative to the other, and a pair of second shoulders (30) positioned in spaced apart relation, each shoulder being engageable with the band for maintaining the band substantially concentric within the housing.

In regards to claim 11, Weinhold discloses the housing comprising a plurality of housing portions attached to one another end to end to extend around the pipes.

In regards to claim 12, Weinhold discloses fasteners attaching the housing portions to one another.

In regards to claim 13, Weinhold discloses the shoulders being positioned at a predetermined longitudinal distance from one another so as to engage the rings and thereby limit angular deflection between the pipes to a maximum of up to about 2°.

In regards to claim 14, Weinhold discloses the shoulders being positioned at a predetermined longitudinal distance from one another so as to engage the rings and thereby limit angular deflection between the pipes to a maximum of up to about 4°.

### ***Response to Arguments***

Applicant's arguments filed 8/5/2005 have been fully considered but they are not persuasive. The Applicant argues that Weinhold does not disclose a pair of second shoulders positioned in spaced apart relation, each shoulder being engageable with the band for maintaining the band substantially concentric within the housing. The Examiner disagrees. In Figures 2 and 3, Weinhold clearly illustrates a pair of second shoulders (30) positioned in spaced apart relation, each shoulder being engageable with the band for maintaining the band substantially concentric within the housing.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 3679

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron M. Dunwoody whose telephone number is 571-272-7080. The examiner can normally be reached on 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on 571-272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Aaron M Dunwoody  
Primary Examiner  
Art Unit 3679

.amd